

## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/537,976  
Source: PCT  
Date Processed by STIC: 06-16-2005

***ENTERED***



PCT

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION:** US/10/537,976

**DATE:** 06/16/2005  
**TIME:** 10:28:45

**Input Set :** N:\DA\pto.da.txt  
**Output Set:** N:\CRF4\06162005\J537976.raw

3 <110> APPLICANT: Imperial College Innovations, Ltd.  
 5 <120> TITLE OF INVENTION: Bacterial Virulence Genes  
 7 <130> FILE REFERENCE: MRM/PJG/24342  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/537,976 (Pg -6)  
 C--> 9 <141> CURRENT FILING DATE: 2005-06-09  
 9 <150> PRIOR APPLICATION NUMBER: GB 0228691.2  
 10 <151> PRIOR FILING DATE: 2002-12-09  
 12 <160> NUMBER OF SEQ ID NOS: 63  
 14 <170> SOFTWARE: PatentIn version 3.2  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 3344  
 18 <212> TYPE: DNA  
 19 <213> ORGANISM: Actinobacillus pleuropneumoniae  
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 26 cttctctcggtt cgagataaaaa ttaaacacga ccggcacttg tgtcgcccgcata 180  
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 34 tgtgcggtat tacgactgct cacgcccgtga tagcacatga cgatgaccgg ttcttcataa 420  
 36 tccacttcat ctaaaaaaaaacg cccgttagct tcattagttt aatggAACgc atcttgcgg 480  
 38 tggctatagg cataacgacg tccatcacga atatccgcta aagtgcgcacc ttctttcg 540  
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 42 caataagaaaa aataaaaccaa ataaaaattaa tcgactatac cataagacgt ttacaaaaat 660  
 44 aaacgagaat acctattattt acgagggtt gaa tttctgact tacttagtat aattgcaaaac 720  
 46 cattttcattt atacagaact cactgtttgc ttcttttaga ctgtttccga ggattttatg 780  
 48 gaacaaatgc ttgaactttt accaagggtcat gttgattata ttatTTTtgg cttattacta 840  
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 54 accatttcca ctatcggtgc caacggccct tatatcggtt tatttaggaac cgtatttaggg 1020  
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 76 agaatgtcgcc tatcggtacc aaaaaagata cctcgaaagaa ataggatacg agtatgaaga 1680  
 78 aaaaacattt tcgtatcggtt ttaaccggctt ccattttat ccataccgctt attttcggcg 1740

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 84 cggcacccgccc ggagccggag aaagtcgaag tcgaggccgaa accggagcct gaagcggaaag 1920  
 86 ctattccaga acttaaacct cagcctaagc cgaaagaaaa accgaaggaa aagcttaagg 1980  
 88 aaaaacccaaa accgaaagaa ccgccaaagc ctaaagaaaa agaaaaacct aaaaaagaga 2040  
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 129 cacaacgtat ggcgtatcat ttattgcaac gcaatcggtc cggcggatc aatttatcca 3240  
 131 aaggcttaaa tgaagcgatg acgcatatcg gtcattgcgg ttctgcgt actttaccg 3300  
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 137 <211> LENGTH: 1080  
 138 <212> TYPE: DNA  
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 148 ggtttatctg tcgggtggaa taaatattt aaagaaatta agcaatctcc tataaaaa 240  
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 164 aaggtaaaa aaggtgagct attagctgtt attgatccac gtctggctga aacggaatta 720  
 166 aaactagcaa aagctgagct agcaaattgt tctgtaatt tggatataaa aaaaattaat 780  
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 170 agccaaaagg aaacagaaga agccaaaagt agattaaata cggccaaagc agaacttcaa 900  
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Input Set : N:\DA\pto.da.txt  
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gtttaggta ttatcatgc caaagatctc taaaattcc tcagaaccga 360  
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NO: 6  
H: 575  
DNA  
ISM: Actinobacillus pleuropneumoniae  
NCE: 6

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aacgccagtt ttcaaattca acgctgatac cgcttaaggt ttcgacttta 240  
acgcttctt aacacggtcg atagccgctt tagcatcagt taatttactg 300  
ccggtgacgg gaatttatcc aaacgagcac cgactaattc gcttaacgg 360  
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acggaaata atggtgagca gacatttcac caccataaat cgcatctact 480  
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NO: 7  
H: 379  
DNA  
ISM: Actinobacillus pleuropneumoniae  
NCE: 7

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NO: 8  
H: 876  
DNA  
ISM: Actinobacillus pleuropneumoniae  
NCE: 8

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406	aatcagcgaa	cagcacggta	tgaatttagc	gacgcacagt	tttatatctct	atgcgaaatg	720
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420	gatcaccgca	ggaaaaaaccg	tcattcgcta	ccaaggtttgc	cagatagggc	aagtaaaaaa	1140
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443	acaatgtatt	taatttcgtt	tcttaccgg	caaacgccgg	cacaatttgc	ggcattaaat	360
445	aatctcagtg	tagagagtaa	attacacgta	ggtcaaatac	tgcgtgtaa	ataacggtag	420

RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 489 ✓  
Seq#:41; N Pos. 528

**VERIFICATION SUMMARY**

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Input Set : N:\DA\pto.da.txt

Output Set: N:\CRF4\06162005\J537976.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:480

L:1267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:480